



STATE OF ARIZONA
DIVISION OF EMERGENCY
MANAGEMENT



RECOVERY SECTION

STANDARD OPERATING PROCEDURES

PUBLIC ASSISTANCE PROGRAM

SECTION 10.d

FLOODPLAIN MANAGEMENT

Rev 5/08



STATE OF ARIZONA DIVISION OF EMERGENCY MANAGEMENT PUBLIC ASSISTANCE PROGRAM



STANDARD OPERATING PROCEDURES

FLOODPLAIN MANAGEMENT

I. Overview

Category E projects (Buildings and Contents) that are located in a 100-year floodplain (any Zone A on a Flood Insurance Rate Map) are subject to the Federal Executive Order (EO) 11988. This EO requires that the 100-year floodplain be avoided unless there is no practical alternative or to mitigate the effect of potential flooding through such measures as elevating structures or for commercial structures, flood proofing to the level 100-year floodplain. In Arizona, the requirement is one foot above the 100 year flood elevation.

Public Buildings located in the 100-year floodplain should be covered by flood insurance through the National Flood Insurance Program. **If it is not covered by a standard flood insurance policy the amount of Public Assistance claim will be reduced by the amount of coverage available for the particular building that could have purchased by the applicant. The same restriction applies to equipment and other contents located in the building.**

The applicant will be required to purchase and maintain flood insurance on the facility. If flood insurance is not maintained, the facility will not be eligible to receive assistance in future disasters.

If the estimate for the repair of disaster-related damage is less than \$5,000, the insurance purchase requirement is waived.

Every community in the State of Arizona that has floodplains, with the exception of the Native American Tribal Lands, is participating in the National Flood Insurance Program.

II. FLOODPLAIN MAPS FOR PROJECT WORKSHEETS

Project Worksheets (PWs) with an estimated repair cost of more than \$5,000 in Damage Categories C through G, located in the 100-year floodplain, must include a copy of the Flood Insurance Rate Map (FIRM) for the site in the PW package. FIRMS can be located on FEMA's web site as follows:

- On the MSN Address Space, (Do not use "search")
- Go to FEMA.gov;

- On FEMA's home page click on "Floods," (Under Disaster Information)
- Next click on "Flood Maps;"
- Next on "Looking for Flood Maps;"
- Follow prompts for state, county and community.
- Click on "Get FEMA Issued Maps".

A list of floodplain maps for the community will appear. The maps are organized by community number and map number. At the very bottom of the list is a Map Index for the community.

Note: If you have not first located the damage site on a paper copy of the map, you will have difficulty locating it on the electronic map. It is much faster and more accurate to have paper copies of the FIRMs available to locate specific areas. FIRMs can be requested from the FEMA floodplain representative in the Joint Field Office (JFO) and they can usually have them within a day or two. When the work for the current declaration is over, keep FIRMs for future use. FIRMs for Gila, Pinal, Pima, Greenlee and Graham Counties and their incorporated cities and towns are currently available in the PA Conference Room.

Flood Insurance Studies (FIS) used for mapping the floodplains are very useful for areas where mitigation is requested. The FIS contains flood frequency analysis on streams that are included in detailed studies on the FIRMs. These can also be requested from the FEMA floodplain representative at the JFO and kept for future disasters. Flood Insurance Studies for: Gila, Graham, Greenlee, Pima and Pinal Counties in the PA Conference Room.

Periodically, there will be restudies and new maps for communities. Although our maps will become outdated, they can still be used to locate damage areas. The new map panels will cover the same areas as the outdated maps. The maps on the FEMA internet site should be up to date, so these can be used for PWs. The paper maps are tools for locating damage areas on the internet maps

III. READING FLOODPLAIN MAPS

There can be many FIRM panels for each community. Each map panel is numbered with a community number assigned by FEMA and panel numbers for different areas of the community. A Map Index will provide the panel for the area being researched. Each map contains a "Key to Map" and an "Explanation of Zone Designations." In all cases, A Zones are 100-year floodplains. On the older maps, B Zones are 500 year floodplains and development here is not regulated by FEMA. On the newer maps, the light grey X Zones also indicate a 500 year floodplain. White areas are not in a floodplain. The latest maps (dated September, 2004) were printed on Digital Orthophoto Quadrangles from the U.S. Geological Survey. Floodplains on those maps are in blue because of the grey background.

Areas owned by the Federal Government, e.g., national parks and forests, are not mapped for floodplains. The maps will indicate that it is government land and there will be no shaded areas.

Some FIRMs for Arizona communities are 20+ years old. Several years ago FEMA started a Map Modernization Program to update all FIRMS. The areas with the oldest maps are to be restudied and new maps produced. Studies and restudies are very time consuming and can take as long as four years to be printed. If the community finds discrepancies in the study, it can take years longer. Since Arizona is growing so fast, new developments may not be included on FIRMs. Review the FIRM with the Public Assistance Coordinator (PAC) to find the approximate area to see if you can find the correct location. If there is a floodplain in the area, the developer would have to obtain a Letter of Map Revision prior building a subdivision. FEMA does not print a new map for these types of revisions; however, the area can be located by going to the FEMA.gov map site. Once the appropriate map is determined, click on the blue dot for that map panel. The blue dot indicates changes have been made to the map. For an entire subdivision a Letter of Map Revision (LOMR) would have been required by the community. Click on the LOMR and at the very end of all the explanation for the LOMR to see a copy of the area of the map that was revised. If this is the area for which PW has been written, use the revised map. *If downloading the LOMR takes too much time, use the panel shown for the area on the web site. It sometimes takes 45-55 minutes to download a LOMR. The current map will indicate the flood hazard areas prior to development of the subdivision. It probably won't affect the floodplain status of the roads.*

IV. PREPARING FIRMS FOR PWs

First find the damage location on the paper FIRM. Use this as a guide for locating the damage area on the electronic map. Make a "Firmette" as follows:

Find the damage area on the electronic map at fema.gov

- Click on "Make Firmette" button; a pink rectangle will appear
- Move the pink rectangle to the area to be printed
- Click on "Print Area" (rectangle turns green)
- Click on "Print Direction Arrow"
- Click on "Title Block:"
- Click on Adobe
- Open the map in Adobe and check to be sure it's the area you need.
- Print a copy for the PW package
- Save a copy to the electronic file that the PAC has created for the specific area. When saving the map, it's a good idea to use the map panel number in the file name. When naming the file, be sure the PW number is included before the

map panel number. This makes it a little easier to recognize the documents in the PW files.

V. THE 8-STEP FORM

For Floodplain damage sites with damage over \$5,000, FEMA requires completion of their form entitled "Reconnaissance Review Report for Floodplain Management." It's referred to as the 8-step review. It is not required for Categories A and B PWs. The cost of repair and category of work is included on each PW. The 8-step form also requires the FIRM community and panel numbers. These forms should also be saved on the network under the PW number folder that the PAC has established with a hard copy for the PW package. The Floodplain Specialist should appear on the bottom of the second page of this form.

* Additional references regarding Flood Insurance and Floodplain Management can be found in the FEMA Policy Digest (FEMA 321) Pages 58 and 59.